

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A light emitting diode, comprising:

a semiconductor substrate;

a light-emitting region including an active layer provided between a first conductivity type cladding layer formed over the semiconductor substrate and a second conductivity type cladding layer;

a transparent conductive film made of a metal oxide and located over the light-emitting region;

a first electrode formed on the upper side of the transparent conductive film;

a second electrode formed on the whole or a part of the bottom of the semiconductor substrate;

a direct transition AlGaAs layer made of $\text{Al}_x\text{Ga}_{1-x}\text{As}$ ($0.01 \leq x \leq 0.43$) as a preventing layer for preventing exfoliation of the transparent conductive film, the preventing AlGaAs layer being made of a compound semiconductor containing at least aluminum and located between the second conductivity type cladding layer and the transparent conductive film, the AlGaAs layer being added with at least one of Zn, Be and Mg, and C, the preventing AlGaAs layer having a [[high]] carrier concentration of $1 \times 10^{19} \text{ cm}^{-3}$ or higher;

an undoped layer or a low carrier concentration layer formed between the active layer and the second conductivity type cladding layer, wherein the undoped layer or the low carrier concentration layer is a layer other than the active layer and comprises a bandgap greater than the active layer;

a second conductivity type contact layer formed between the second conductivity type cladding layer and the AlGaAs preventing layer; and

an undoped layer inserted into the second conductivity type contact layer.

2. (Currently Amended) The light emitting diode as defined in claim 1, wherein:

the AlGaAs preventing layer contains a conductivity type determining determination impurity at a concentration of $1 \times 10^{19} \text{ cm}^{-3}$ or higher.

3. (Currently Amended) The light emitting diode as defined in claim 1, wherein:
the AlGaAs ~~preventing~~ layer has a film thickness of 300 nm or less.
4. (Currently Amended) The light emitting diode as defined in claim 2, wherein:
the AlGaAs ~~preventing~~ layer has a film thickness of 300 nm or less.
5. (Original) The light emitting diode as defined in claim 1, wherein:
the transparent conductive film is made of indium tin oxide.
6. (Original) The light emitting diode as defined in claim 2, wherein:
the transparent conductive film is made of indium tin oxide.
7. (Canceled)
8. (Canceled)
9. (Original) The light emitting diode as defined in claim 1, wherein:
the light-emitting region is made of $(\text{Al}_x\text{Ga}_{1-x})_y\text{In}_{1-y}\text{P}$ ($0 \leq X \leq 1$, $0 \leq Y \leq 1$).
10. (Original) The light emitting diode as defined in claim 2, wherein:
the light-emitting region is made of $(\text{Al}_x\text{Ga}_{1-x})_y\text{In}_{1-y}\text{P}$ ($0 \leq X \leq 1$, $0 \leq Y \leq 1$).
11. (Currently Amended) The light emitting diode as defined in claim 1, wherein:
the ~~preventing layer is an~~ AlGaAs layer has ~~having~~ a bandgap which is smaller than that of the active layer; ~~and~~
~~the AlGaAs layer is made of~~ $\text{Al}_x\text{Ga}_{1-x}\text{As}$ ($0.01 \leq X \leq 0.43$).

Claims 12-15. (Canceled)

16. (Withdrawn – Currently Amended) The light emitting diode as defined in claim 1, wherein:
~~the preventing layer is added with at least one of Zn, Be and Mg, and C; and~~
C is autodoped.
17. (Currently Amended) The light emitting diode as defined in claim 11, wherein:

~~the AlGaAs layer is added with at least one of Zn, Be and Mg, and C; and~~
C is autodoped.

18. (Withdrawn – Currently Amended) The light emitting diode as defined in claim 1,
wherein:

the AlGaAs ~~preventing~~ layer is formed at a growth temperature of 600°C or lower.

19. (Original) The light emitting diode as defined in claim 11, wherein:

the AlGaAs layer is formed at a growth temperature of 600°C or lower.

20. (Withdrawn – Currently Amended) The light emitting diode as defined in claim 1,
wherein:

the AlGaAs ~~preventing~~ layer is formed at a V/III ratio in raw materials of 50 or less at
the time of growth.

21. (Original) The light emitting diode as defined in claim 11, wherein:

the AlGaAs layer is formed at a V/III ratio in raw materials of 50 or less at the time of
growth.

22. (Original) The light emitting diode as defined in claim 11, wherein:

the transparent conductive film is made of indium tin oxide.

23. (Original) The light emitting diode as defined in claim 11, wherein:

the light-emitting region is made of $(\text{Al}_X\text{Ga}_{1-X})_Y\text{In}_{1-Y}\text{P}$ ($0 \leq X \leq 1, 0 \leq Y \leq 1$).